

WHAT IS CLAIMED IS:

1. A method of storing information representative of signals recorded on a recording medium accommodated within a recording medium cartridge, comprising the steps of:

providing a memory device as part of said recording medium cartridge; and

storing said information in the form of a tree structure comprising at least a plurality of directory entries each having associated therewith a plurality of data items, each said data item representing a respective portion of said signals recorded on said recording medium and containing data indicative of a starting position and an ending position on said recording medium of said respective portion of said signals.

2. A method according to claim 1; wherein said recording medium is a magnetic tape.

3. A method according to claim 1; wherein said recorded signals include video signals.

4. A method according to claim 1; further comprising the step of adding supplementary data to at least some of said data items in addition to said data indicative of said starting and ending positions.

5. A method according to claim 4; wherein said supplementary data includes text data for identifying said respective portion of said signals.

1 6. A method according to claim 5; wherein said step
2 of adding said supplementary data includes loading said recording
3 medium cartridge in a recording and reproducing apparatus and
4 entering said text data by means of a remote control device for
5 controlling said recording and reproducing apparatus.

6 7. A method according to claim 4; wherein said
7 supplementary data includes image data for identifying said
8 respective portion of said signals.

9 8. A method according to claim 1; wherein at least
10 some of said data items are formed of at least one data packet,
11 each said data packet having a fixed length and a predetermined
12 format.

13 9. A method according to claim 8; wherein each said
14 data packet includes a level code indicative of a level of said
15 tree structure, said data packet being assigned to said level of
16 said tree structure.

17 10. A method according to claim 9; wherein each said
18 data packet includes a plurality of data bytes, said level code
19 being included in a first one of said data bytes.

20 11. A method according to claim 10; wherein each said
21 data packet is formed of five data bytes.

22 12. A method of retrieving information representative
23 of signals recorded on a recording medium accommodated within a
24 recording medium cartridge, said information having been stored
25 in the form of a tree structure in a memory device provided as

1 part of said recording medium cartridge, the method comprising
2 the steps of:

3 loading said recording medium cartridge in a recording
4 and reproducing apparatus that is operatively connected to a
5 display device; and

6 displaying at least some of said information on said
7 display device.

8 13. A method according to claim 12; wherein said
9 displaying step includes displaying at least some of said
10 information in the form of a table.

11 14. A method according to claim 12; wherein said
12 displaying step includes displaying at least some of said
13 information in the form of a list.

14 15. A method according to claim 12; wherein said
15 signals recorded on said recording medium comprise video signals.

16 16. A method according to claim 15; wherein said
17 display device is selected from the group consisting of a video
18 monitor and a television receiver.

19 17. A method according to claim 16; wherein said
20 information stored in said memory device includes image data
21 representative of respective portions of said recorded video
22 signals, and said displaying step includes displaying at least
23 one image representative of a respective portion of said recorded
24 video signals.

1 18. A method according to claim 17; wherein said
2 displaying step includes displaying a plurality of images
3 simultaneously in split-screen form, each of said displayed
4 images representing a respective portion of said recorded video
5 signals.

6 19. A method according to claim 18; further comprising
7 the steps of:

8 selecting one of said simultaneously displayed images;
9 and

10 reproducing the respective portion of said recorded
11 video signals represented by said selected one of said
12 simultaneously displayed images.

13 20. A method according to claim 12; wherein said
14 displayed information includes a plurality of items each
15 representing a respective portion of said signals recorded on
16 said recording medium; and further comprising the steps of:

17 selecting one of said items of said displayed
18 information; and

19 reproducing the respective portion of said recorded
20 signals represented by said selected one of said items.

21 21. A recording medium cartridge for use with a
22 reproducing apparatus, comprising:

23 a housing;

24 a recording medium accommodated within said housing;

25 a memory device carried by said housing; and

1 terminals associated with at least one outer surface of
2 said housing for providing electrical connections between said
3 memory device and said reproducing apparatus;

4 said memory device having stored therein data signals
5 representative of program information recorded on said recording
6 medium, said data signals being stored in the form of a tree
7 structure comprising at least a plurality of directory entries
8 each having associated therewith a plurality of data items, each
9 said data item representing a respective portion of said program
10 information and containing data indicative of a starting position
11 and an ending position on said recording medium of said
12 respective portion of said program information.

13 22. A recording medium cartridge according to claim
14 21; wherein said recording medium is a magnetic tape.

15 23. A recording medium cartridge according to claim
16 21; wherein at least some of said data items are formed of at
17 least one data packet, each said data packet having a fixed
18 length and a predetermined format.

19 24. A recording medium cartridge according to claim
20 23; wherein each said data packet includes a level code
21 indicative of a level of said tree structure, said data packet
22 being assigned to said level of said tree structure.

23 25. A recording medium cartridge according to claim
24 24; wherein each said data packet includes a plurality of data

1 bytes, said level code being included in a first one of said data
2 bytes.

3 26. A recording medium cartridge according to claim
4 25; wherein each said data packet is formed of five data bytes.

5 27. A recording medium cartridge according to claim
6 21; wherein said memory device comprises an integrated circuit
7 device.

ADDA

009T90"42T96560